National Broadband Strategies in Japan (2001-09)

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National Broadband Strategies (2001-)

•IT Strategy Headquarters was established based upon IT Basic Act in 2001.

•IT Strategy Headquarters has made 4 ICT strategies (+1 urgent measure plan) since 2001. (MIC established u-Japan Policy in 2004.)

•For the broadband deployment, competition policies have been key issues from the beginning. e-Japan II of 2003 introduced the idea of supports for non-profitable areas.

•Each strategy set the target for the broadband deployment and increase of service quality.

•IT Strategy Headquarters has made implementation programs for the ICT strategies annually reflecting the review on operations under the Strategies.

IT Strategy Headquarters (1) Mission

- The mission of IT Strategy Headquarters (The Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society) is stipulated in Articles of IT Basic Act. It is authorized to decide National Strategies and implementation programs.

IT Basic Act (Basic Act on the Formation of an Advanced Information and Telecommunications Network Society (Act No. 144 of December 6, 2000))

(Establishment)

Article 25 The Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society (hereinafter referred to as "the Headquarters") shall be established under the Cabinet for the purpose of swiftly and thoroughly pursuing strategies to form an advanced information and telecommunications network society.

(Affairs under the Jurisdiction of the Headquarters)

Article 26 The Headquarters shall engage in the following work.

(i) Preparation and facilitation of a priority policy program to form an advanced information and telecommunications network society (hereinafter referred to as "Priority Policy Program")

(ii) In addition to what is listed in the preceding item, deliberations on planning of important strategies for the formation of an advanced information and telecommunications network society and the facilitation of such strategies

IT Strategy Headquarters (2) Members

- IT Strategy Headquarters' members were stipulated by or appointed by Prime Minister according to the Basic Act.

Director-General:
Prime Minister (Article 28, Basic Act)

*51 meetings held (Jan.2001-July.2009)

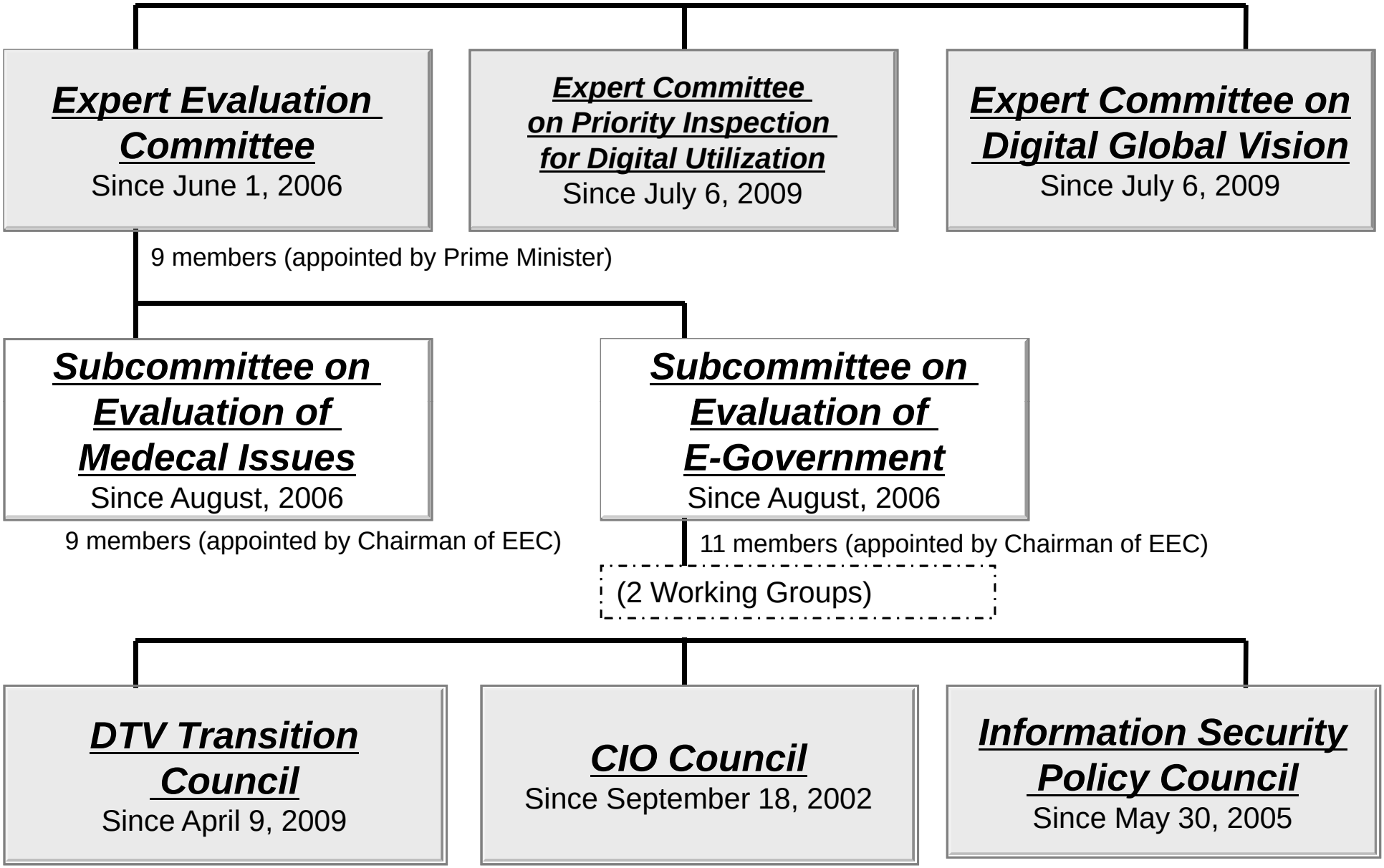
Vice Director-Generals:
State Ministers (Article 29)
- Minister of State for IT
- Chief Cabinet Secretary
- Minister of Internal Affairs and Communications
- Minister of Economy, Trade and Industry

Members:
Other State Ministers and Experts (Article 30)

(Experts [Aug.2009-Aug.2010])
Yuichiro ANZAI (Professor, Keio University)
Fumio OHTSUBO (President, Panasonic Corporation)
Akio SAEKI (Chairman, Miyagi Prefectural Federation of Small Business Associations Chairman of the Board, Tohoku Electronic Industrial Co., Ltd.)
Kaori SASAKI (President and CEO, ewoman, Inc.)
Jiro KOKURYO (Professor, Keio University)
Mitsuyuki CHIBA (Mayor of Ichikawa City)
Satoshi MIURA (President and CEO, Nippon Telegraph and Telephone Corporation)
Teruyasu MURAKAMI (Senior Fellow, Nomura Research Institute, Ltd.)
Hiroshi YASUDA (Professor, Tokyo Denki University)
Katsuaki WATANABE (Vice Chairman, Toyota Motor Corporation)

IT Strategy Headquarters (3) Expert Examination Committees

- IT Strategy Headquarters has established Expert Examination Committiees and Councils under the HQ with its own decisions or Secretary-Generals' decisions.



National ICT Strategies

2001～ 2006～ ～2010 2015

・ Major changes have been seen in the environment for usage of the Internet and in others areas since the last IT strategy was formulated three years ago.
・ In light of the current economic conditions effected by the financial crisis, it is an urgent task to implement economic stimulus measures that utilize information and communications.

Three-Year Emergency Plan (Apr. 2009)

e-Japan Strategy(January 2001)
Establishment of Broadband infrastructure

①Infrastructure
Establishing the internet-accessible environment in 2005
・ high-speed access covering 30 million households
・ ultrahigh-speed access covering 10 million households
②e-commerce
③e-government
④human resource development

e-Japan Strategy II(July 2003)
Focus on Application and Effective Use of IT

Promotion of the effective utilization of IT in the seven leading areas
①medical services ②food ③lifestyle ④small and medium enterprise financing ⑤knowledge ⑥employment and labor ⑦public service

New IT Reform Strategy (January 2006)
Pursuit of IT Structural Reform Capabilities

i-Japan Strategy 2015 (July 2009)

①medical services ②environment ③IT-based safe and secure society(anti-disaster measures etc) ④ITS ⑤e-government services ⑥IT-oriented corporate management ⑦prosperous lifestyle(telework etc) ⑧a society that adopts universal designs (promotion of subtitled television broadcasting etc) ⑨infrastructure ⑩a secure IT society(information security measures) ⑪highly competent human resources ⑫development of human resource base ⑬R&D ⑭international competitiveness ⑮international contribution

4 areas → 7 areas → 15 areas

More focus on application and utilization

Solving social problems through utilizing ICT

Becoming the world's leading IT-oriented nation by 2005

Becoming a society where anyone can appreciate the benefits of IT at anytime from anywhere by 2010

Broadband policies & targets on Infrastructure

2001 ～ 2006～ ～2010 2015

e-Japan Strategy (January 2001)
Broadband Infrastructure Deployment through Competition

Target: High-speed constant access networks to at least 30million households; Ultra high-speed constant access to 10million households **by 2005**

Achieved by 2003

e-Japan Strategy II (July 2003)
Competition & special measures for not profitable areas

Target: Elimination of areas where broadband remains unavailable **by FY 2010**

New IT Reform Strategy (January 2006)
Fair Competition & private sector-incentives

***i*-Japan Strategy 2015 (July 2009)**

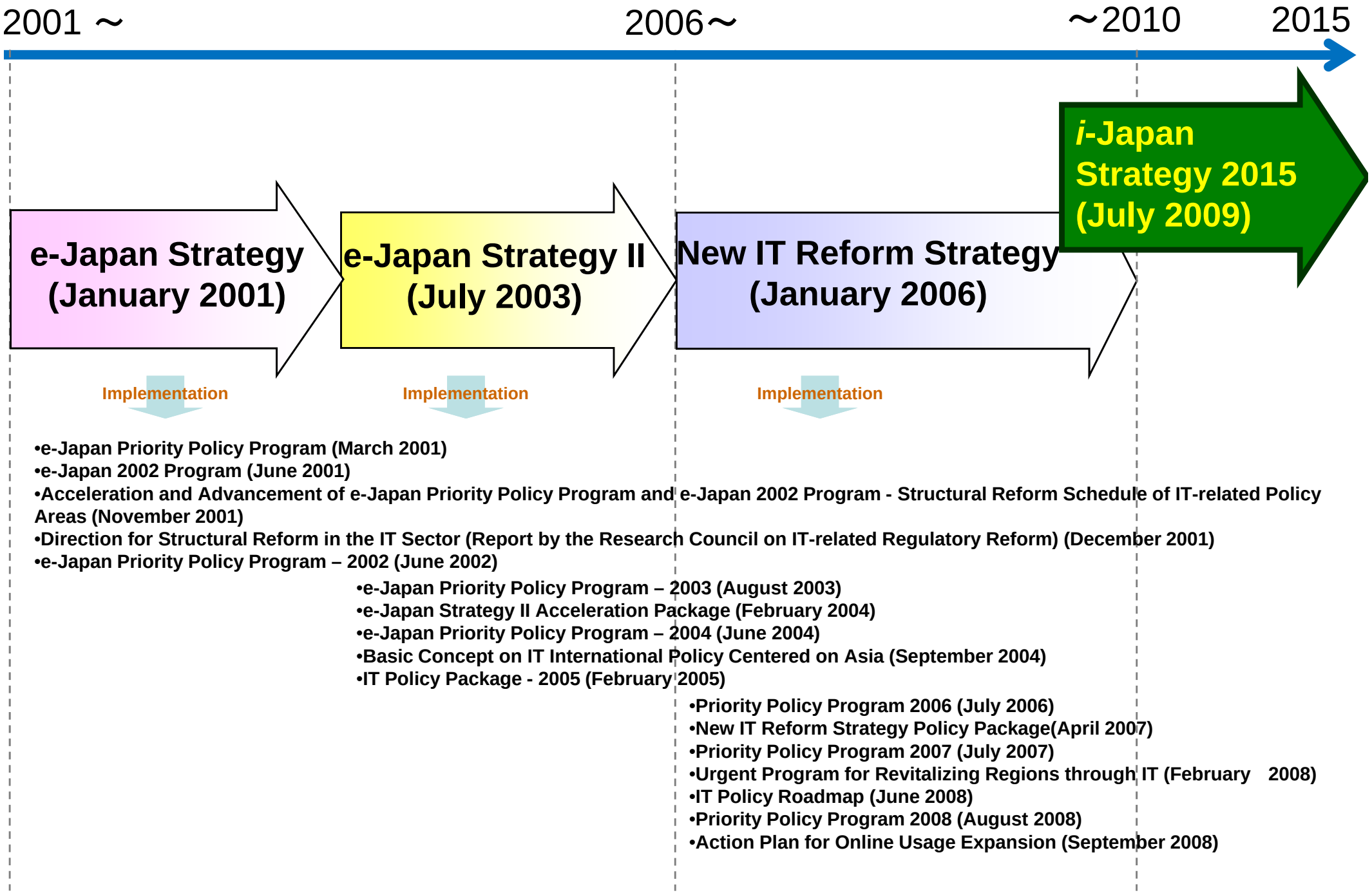
Target: Over 100 Mbps for mobile, 1 Gbps for fixed **by 2015**

Target: Elimination of Broadband Zero Area **by 2010** (+ Make 90% households to access Ultra high-speed interactive broadband by 2010)

MIC's "u-Japan" Policy (December 2004)

* Ultra high-speed (constant) access networks :
The Internet networks through which even large volume picture data such as movies can be smoothly downloaded. At present, the Internet access networks by optical fiber is the major example.
* High-speed (constant) access networks :
The Internet networks through which music data and others can be smoothly downloaded. At present, the Internet networks by such lines as xDSL, Cable TV and Subscribers' Wireless Access System are the major examples.

National ICT Strategies and Implementation Programs



Three-Year Emergency Plan (April 2009)

If the government invests three trillion yen for the next three years to implementation these measures, it is expected to give a job creation effect of increasing 400 - 500 thousand workers.

I. Promotion of Three Key Projects by Digital Special Zones, etc

e-Government e-Municipality

- Digital archiving of useful information in the possession of administrative agencies, etc.
- Comprehensive digitized administrative information, such as statistical information and topographical information, made available to the public
- Development of "Citizen's Post Office Box" (tentative)
- Construction of "The Kasumigaseki Cloud" (tentative)
- Promotion of e-municipality through utilization of cloud computing and/or based on the regional information platform
- Study on ID of individuals and enterprises

Medical Care

- Study on the utilization of ASP/SaaS as a means of reducing costs through the creation of electronic medical insurance receipts
- Development of high-speed broadband networks that enable medical institutions across the country to instantaneously transmit image diagnosis information, patient referral documents, etc.
- Development of networks of medical institutions, etc. and the public system infrastructure based on the autonomous settlement region concept
- Promotion of the utilization of ubiquitous network technology, etc. for safety and security without increasing burdens on health personnel

Education/Human Resources

- Development of digital educational infrastructure, such as intra-school LAN, electronic blackboards, and digital terrestrial TVs, across the country
- Development of the environment through the enhancement of educational/cultural content, the delivery of content to classrooms through archiving, etc.
- Promotion of digitization of teaching-related tasks to reduce burdens on teachers
- Promotion of public service activities and literacy-development activities at home and in the community
- Development of human assets to develop and utilize advanced digital technology (human assets for advanced digitization)

II. Vitalization of Industries/Communities and Development of New Industries

- **Development of infrastructure for existing industries, including small and medium enterprises** Enhancement of safety and reliability of ASP/SaaS, development of infrastructure for e-commerce that enables joint material procurement, joint sales, and so forth, etc.
- **Vitalization of agriculture, forests and fisheries** Development of broadband using optical fibers in areas where conditions are disadvantageous, promotion of wider use of the information provision system at direct sales stores utilizing mobile phones, etc.
- **Vitalization of regional communities** Support for producing programs, for example, tourist guides for local areas, for broadcast; promotion of the "Hometown Mobile Project;" promotion of the ubiquitous town concept, etc.
- **Creation of new industries utilizing digital technology** Acceleration of research and development of the next generation wireless communications technology utilizing demolished sites of analog TV antenna sites and assigning new frequencies, etc.
- **Measures, such as green IT, to address global warming** Promotion of the development of eco-Internet, promotion of telework, promotion of visual display of household CO_2 emissions in homes, etc.
- **Acceleration of the practical use of ITS, etc.** Acceleration of the practical and wider use of ITS, aiming to realize, for example, "no-crash vehicles," etc.
- **Reinforcement of international cooperation** International joint research and development using a high-speed large-capacity network , mutually beneficial international expansion and cooperation in Asia, Latin America, and other regions, etc.

III. Development of Digital Infrastructure to Support Development Across All Fields

(1) **Development of broadband infrastructure**

(2) **Smooth shift to digital terrestrial television broadcasting**

(3) **Research and development to create innovative digital technology**

(4) **Enhancement of topographical information**

i-Japan Strategy 2015 (July 2009)

Japan's vision for 2015

- Digital technology, like "air" or "water", is accepted as a normal part of the surrounding environment. It encompasses the whole economic system (Digital Inclusion), enabling a high standard of living and giving people the sense of being connected with one another.
- Digital technology and information transforms the whole economic system to generate new vitality (Digital Innovation) enabling us as individuals or as members of society and participants in the economy take the initiative to create new or transform old values in a dynamic way.

Turning the vision into reality

- Create a strategy to bring about a digital society where easy-to-use human-centric digital technology is readily embraced by the people to become as normal a part of everyday life as air or water
- A digital strategy based on four new approaches
  - Easy-to-use digital technology
  - Break down the barriers preventing the utilization of digital technology
  - Ensure a sense of security about using digital technology
  - Create a new Japan by the infusion of digital technology/information throughout the economic system

Pillars of *i*-Japan Strategy

Three Priority Areas

e-Government (National/Local)

- Establish a framework to promote e-government (such as setting up a government CIO), follow-up past plans, and establish the PDCA cycle as an institutional system.
- The "national electronic private mail box" *) (tentative name) system should be implemented widely to provide convenient one-stop government services and promote government transparency.

*)The "national electronic private mail box" system is to be implemented by 2013. The basic outline, including the social security number/card (tentative name), is to be developed by the end of this fiscal year, with an eye to basing it on the existing system.

Medicine/Health Care

- Respond to the shortage of doctors in regional communities
  - Utilize telemedicine technologies
  - Help doctors to maintain and update their skills
  - Encourage collaboration among regional health care services etc.
- Implement Japan's version of EHR*) (tentative name)
  - Reduce medical malpractice, provide consistent health care throughout a person's life
  - Digitize information regarding prescriptions and preparation instructions
  - Use anonymous health information for epidemiological purposes etc.

*) Electronic Health Records

Education/Human Resources

- Promote the use of digital technology in classrooms to motivate students and to improve academic ability and the capacity to utilize information effectively
  - Improve the ability of teachers to utilize digital technology in the classroom
  - Use digital equipment, such as e-blackboards, in the classroom for effective teaching etc.
- Provide ongoing training to develop individuals with high-level digital technology skills
  - Widespread deployment and enhancement of practical training/education sites
  - Through collaboration among industry, academia and government, develop a system that functions like a national center etc.

Revitalizing industries & regional communities/fostering new industries

Carry out structural reforms in all industries and revitalize regional communities by utilizing digital technology/information, to strengthen the international competitiveness of Japan

- Develop business infrastructure for small and mid-sized enterprises
- Promote green IT/ITS
- Develop new types of business within regional industries
- Increase the number of teleworkers (to double the number of teleworkers working from home)
- Create a new creative market

Establishing digital infrastructure

Support progress in utilization of digital technology in all fields to promote growth

- Establish broadband infrastructure (over 100Mbps for mobile, 1Gbps for fixed)
- Establish information security measures
- Promote development of digital infrastructure technology
- Improve infrastructure for the distribution/utilization of digital information

Matters requiring further consideration

- Thorough examination of regulations, institutional systems, practices: Identify regulations, institutional systems and practices that are hampering the utilization of digital technology/information by carrying out the first thorough examination in 2009. Measures will be taken based on the findings, with further examinations to be conducted in the years following.
- Develop the "Digital Global Vision" (tentative name): A vision for the enhancement of Japan's digital technologies and the strengthening of the international competitiveness of related industries to be developed by the end of fiscal 2009.

Thank you!